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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Atty. Docket

Klaus Melgaard et al.

PHB 34305A

Serial No.: 09/455,664

Group Art Unit: 1723

Filed: December 7, 1999

Examiner : M. OCAMPO

REMOVABLE FILTERS AND WATER-HEATING VESSELS INCORPORATING

SUCH

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria , Virginia 22313-1450

Sir:

Responsive to the Office Action dated November 19, 2003 enclosed is an original plus two copies of a corrected Appeal Brief in the above-identified patent application.

Respectfully submitted,

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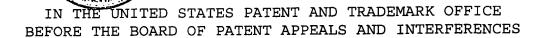
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On: Dec. 10, 2003

By: Elisan De Lucy

NORMAN N. SPAIN, Reg. 17,846
Attorney



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[ `] transmitted by facsimile to the U.S. Patent and Trademark Office at 703-872-9306

On: <u>Dec. 10, 2003</u>

By: Elisas De Luca

### APPEAL BRIEF

Sir:

This is an appeal from the Final Office Action of March 31, 2003. A Notice of Appeal was filed July 9, 2003.

# 1. REAL PARTY IN INTEREST

The real party in interest is the assignee, U.S. Philips
Corporation, a Delaware corporation, N.V. Philips Electronics, a
corporation of the Netherlands, is the ultimate parent of U.S.
Philips Corporation.

affected, or have a bearing on the Board's decision in this appeal.

# 3. STATUS OF CLAIMS

The claims standing in this case are 1-15. Claim 13 is allowed. Claims 1,7,8,12 and 14 have been cancelled without prejudice. Claims 2-6,9-11 and 15 are on appeal.

# 4. STATUS OF THE AMENDMENTS

No Rule 116 Amendment affecting the claims on appeal has been filed.

### 5. SUMMARY OF THE INVENTION

The invention as described on page 1, line1-page 3, line 23 of the specification and as defined by the claims on appeal is directed to a filter for use in a water heating vessel for removing sedimentary material, including scale, from the water and to a water heating vessel including such a filter.

As shown on page 1, line 10-page 2, line 11 of the specification removable filters for removing scale for use in water kettles, specifically electric water kettles is shown in U.K. Patent GB-B2251547.

As shown on page 1, line 12-line 32 of the specification, the filters described in this U.K. patent consists of a plastics

frame having windows covered by a fine filter mesh, the filter mesh being positioned within the water-containing body of the kettle that overlies the output spout of the kettle so that the water heated in the kettle passes through the mesh of the filter when being poured out through the spout.

As further shown in this portion of the specification, these filters have proved to be effective in preventing scale and other sedimentary materials from being poured out with the water from the sprout of the kettle. However, as shown therein, these filters were not effective in preventing scale formation on interior metallic surfaces of the kettles such as an immersion heater element or an exposed metal bottom wall surface to which a concealed type heating element is attached thereby not only presenting an unsightly appearance but also impairing the operational effectiveness of the heating element.

As shown on page 2, lines 11-20 of the specification, it was known to use, as scale collectors in water kettles, small compacted ball-like blocks of stainless steel wire or mesh, which blocks dropped into the kettles. However, as also shown in this portion of the specification, these blocks have the disadvantage off possible causing damages, including abrasions and scratches, to interior portions of the kettles as a result of movement of these blocks within the kettles.

According to one aspect of the invention, as described on page 2, line 22-page 3, line 19 of the specification and as defined by Clams 2-4,6,9,13 and 15, there is provided a new and improved form of replaceable filter for use in a water heating vessel. According to this aspect of the invention this filter comprises a first mesh material provided with a frame and a scale collector, separate from the frame and the first mesh material, coupled to the frame and comprising a block of compressed mesh material different from the first mesh material and having a surface to which scale is attracted.

According to a preferred embodiment of the invention, described on page 3, lines 6-11 of the specification and defined by Claims 2-4 and 6, the scale collector is supported by a carrier member on the frame of the filter. According to an embodiment of the invention, described in this portion of the specification and defined by Claims 3, the carrier member is detachably mounted on the frame. Further, according to a preferred embodiment of the invention, described this portion of the specification and defined by Claim 6 the detachably mounted carrier member is situated on a part of the frame away from the first mesh material.

According to an additional embodiment of the invention, described on page 3, lines 17-19 of the specification and defined by Claim 9, the scale collector is carried on the frame

towards an end of which, when in use in a water heating vessel is closest to the bottom of the vessel.

According to a still further embodiment of the invention, described on page 3, lines 12-16 of the specification and defined by Claim 13, the scale collector comprises a compacted mesh block provided with a bore and is supported by a carrier member on the frame of the filter, the carrier member having a part which extends through the bore of the block and around which part the block is rotatable.

According to an additional aspect of the invention, as described on page 3, lines 20-24 of the specification and defined by Claims 10 and 11 there is provided a water heating vessel which includes a filter in accordance with the invention removably mounted within the vessel and extending over a water output of the vessel, Claim 11 defining an embodiment of the invention in which the vessel is a kettle.

The invention is described in greater detail on page 3, line 25-page 6, line 29 of the specification and Figures 1-5 of the drawing.

In the drawing Figures 1 and 2 are schematic perspective views of a first embodiment of a filter according to the invention, Figure 3 is a partial sectional side view of a kettle showing the filter of Figures 1 and 2 mounted therein, Figure 4 is a front view of a second embodiment of a filter according to

the invention and Figure 5 is a perspective view of a scale collector carrier member used in the second embodiment of the filter.

The reference characters in Figures 1-3 of the drawing have the following designations:

10 is a filter having a supporting frame structure 11 comprising a main wall 12 and an upper end wall 14. The main wall 12 has a window separated into three individual portions 15 covered by stainless steel mesh 17. 21 is a rib integral with the side wall of the kettle 25 is a block of stainless steel wire mesh. 27 is a carrier member fixed to the filter frame and comprising an upper wall 28, a curved side wall 29 and bridging side arms 30. 32 is a boss extension, integrally formed with the upper wall 28, and having a flared, arrow-shaped, end part 33.

35 is a transverse rib formed integrally with the wall 12.

36 is a tongue provided on the side wall 229. The reference characters in Figures 4 and 5 of the drawing have the following designations:

10, 11, 12 and 25 have the above-indicated designations 40 is a carrier member for the block 25 and comprises two interlocking parts 41 and 42. Part 41 consists of base wall 43, opposed, side shoulders 44 raised peripheral edge 45 and integrally formed cruciform structure 46 projecting upwardly

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from the base wall 43. Part 42 consists of top wall 48, side shoulder 49and projection 50. 52 is a cylindrical boss integrally-formed on top wall 48. 54 and 55 are transverse ribs formed on wall 12. 57 is a fixing element securing carrier member 40 to the frame filter.

### 6. ISSUES

The issues in this case are whether Claims 2-4, 6-9, 11 and 15 are rejectable under35 U.S.C. 102(e) as anticipated by O'Flynn et al. and whether Claim 5 is rejectable under 35 U.S.C. 103(b) as unpatentable over O'Flynn et al. in view of Martindale.

### 7. GROUPING OF CLAIMS

Claims 2-4, 6, 9-11 and 15 are considered to be patentable for similar reasons and stand together. Claim 5 is considered to be patentable for different reasons and stands by itself.

### 8. ARGUMENT

I. The Rejection of Claims 2-4, 6, 9-11 and 15 Under 33
 U.S.C. 102(e) as Anticipated by O'Flynn et al

The rejection of Claims 2-4, 6, 9-11 and 15 under 35U.S.C.102(e) as anticipated by O'Flynn et al. is considered to lack merit. The O'Flynn et al. patent is not considered to

teach, or even suggest, the filter, for removing sedimentary material, including scale, from the water on a water heating vessel defined by even Claim 15, the most generic claim. Unlike the filter defined by Claim 15, filter of the O'Flynn et al. patent does not comprise a first mesh material provided with a frame, to which frame there is coupled a scale collector comprising a block of compressed mesh material different from the first mesh material and having a surface to which scale is attracted

Instead, as shown in column 3-line 39-column 4, line 2 and Figures 7, 8 and 10, the filter of the O'Flynn et al. patent comprises a water treatment cartridge 38, for holding water treatment material coupled to a frame(filter plate 26) and comprising wall members 41, 43, 44, 46, 47 and 50 forming a compartment 42 for holding a water treatment material and which walls 43 and 44 having mesh -covered apertures 49.

Additionally, as shown therein, the filter plate 26 may be provided with mesh-covered apertures 34.

It should be noted that there is no teaching, or even suggestion, in the O'Flynn et al. patent that the water - treatment material shown therein is capable of removing anything other than color, odor and bad taste from water, specifically not scale.

It should also be noted that there is no teaching, or even suggestion in then O'Flynn et al., that the mesh covering the apertures 49 has a surface to which scale is attracted or is of a material different from that of the mesh covering the apertures 34.

It is therefore considered that a person of ordinary skill in the art would find no teaching, or even suggestion, in the O'Flynn et al. patent that would lead that person to the filter defined by Claim 15.

# II. The Rejection of Claim 5 Under 35 U.S.C. 103(e) as Unpatentable Over O'Flynn et al in View of Martindal

The rejection of Claim 5 under 35 U.S.C. 103(e) as unpatentable over O'Flynn et al. in view of Martindale is considered to lack merit.

The O'Flynn et al patent is not considered to teach, or even suggest, the filter comprising a scale collectors defined by Claim 5 for reasons given in regard to parent Claim 15.

Martindale, which teaches nothing about filters comprising scale collectors, but only about removable strainers, having no scale collecting function, for use in teapots, clearly cannot be considered to fill the above-noted gaps in the teaching of the O'Flynn et al. patent.

# 9. CONCLUSION

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For reasons thus given, it is considered that the rejection of Claims 2-4,6, 9-11 and 15 under 35 U.S.C. 102(e) as anticipated by O'Flynn et al and the rejection of claim 5 under 35 U.S.C. 103(b) as unpatentable over O'Flynn et al in view of Martindale lack merit.

It is therefore requested that this Honorable Board reverse the decision of the Primary Examiner and allow Claims 2-6,9-11 and 15, all the claims on appeal

Respectfully submitted,

By **1** Norman N. Spain, Reg. 17,846 Attorney (914) 333-9653

### APPENDIX

The claims on appeal are:

- 2. A filter for use in a water heating vessel according to Claim 15, wherein the scale collector is supported by a carrier member on the frame of the filter.
- 3. A filter for use in a water heating vessel according to Claim 2, characterised in that the carrier member is detachably mounted on the frame.
- 4. A filter for use in a water heating vessel according to claim 2, characterised in that the carrier member is permanently mounted on the frame.
- 5. A filter for use in a water heating vessel according to Claim 2, characterised in that the scale collector is removably mounted to the carrier member.
- 6. A filter for use in a water heating vessel according to
  Claim 3 wherein the carrier member is situated on a part of the
  frame away from said first mesh material.
- 9. A filter for use in a water heating vessel according to Claim 15, wherein the scale collector is carried on the frame

towards an end thereof which in use in a water heating vessel is closest to the bottom of the vessel.

- 10. A water heating vessel including a filter according to
  Claim 15 removably mounted within the vessel and extending over
  a water outlet of the vessel.
- 11. A water heating vessel according to Claim 10, characterised in that the water heating vessel comprises a kettle.
- 15. A filter for use in a water heating vessel for removing sedimentary material, including scale, from the water, wherein the filter comprises a first mesh material provided with a frame and a scale collector, separate from said first mesh material and coupled to the frame, said scale collector comprising a block of compressed mesh material different from said first mesh material and having a surface to which scale is attracted.

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corporation of the Netherlands, is the ultimate parent of U.S.
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affected, or have a bearing on the Board's decision in this appeal.

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### 5. SUMMARY OF THE INVENTION

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frame having windows covered by a fine filter mesh, the filter mesh being positioned within the water-containing body of the kettle that overlies the output spout of the kettle so that the water heated in the kettle passes through the mesh of the filter when being poured out through the spout.

As further shown in this portion of the specification, these filters have proved to be effective in preventing scale and other sedimentary materials from being poured out with the water from the sprout of the kettle. However, as shown therein, these filters were not effective in preventing scale formation on interior metallic surfaces of the kettles such as an immersion heater element or an exposed metal bottom wall surface to which a concealed type heating element is attached thereby not only presenting an unsightly appearance but also impairing the operational effectiveness of the heating element.

As shown on page 2, lines 11-20 of the specification, it was known to use, as scale collectors in water kettles, small compacted ball-like blocks of stainless steel wire or mesh, which blocks dropped into the kettles. However, as also shown in this portion of the specification, these blocks have the disadvantage off possible causing damages, including abrasions and scratches, to interior portions of the kettles as a result of movement of these blocks within the kettles.

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According to an additional embodiment of the invention, described on page 3, lines 17-19 of the specification and defined by Claim 9, the scale collector is carried on the frame

towards an end of which, when in use in a water heating vessel is closest to the bottom of the vessel.

According to a still further embodiment of the invention, described on page 3, lines 12-16 of the specification and defined by Claim 13, the scale collector comprises a compacted mesh block provided with a bore and is supported by a carrier member on the frame of the filter, the carrier member having a part which extends through the bore of the block and around which part the block is rotatable.

According to an additional aspect of the invention, as described on page 3, lines 20-24 of the specification and defined by Claims 10 and 11 there is provided a water heating vessel which includes a filter in accordance with the invention removably mounted within the vessel and extending over a water output of the vessel, Claim 11 defining an embodiment of the invention in which the vessel is a kettle.

The invention is described in greater detail on page 3, line 25-page 6, line 29 of the specification and Figures 1-5 of the drawing.

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# 6. ISSUES

The issues in this case are whether Claims 2-4, 6-9, 11 and 15 are rejectable under35 U.S.C. 102(e) as anticipated by O'Flynn et al. and whether Claim 5 is rejectable under 35 U.S.C. 103(b) as unpatentable over O'Flynn et al. in view of Martindale.

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Instead, as shown in column 3-line 39-column 4, line 2 and Figures 7, 8 and 10, the filter of the O'Flynn et al. patent comprises a water treatment cartridge 38, for holding water treatment material coupled to a frame(filter plate 26) and comprising wall members 41, 43, 44, 46, 47 and 50 forming a compartment 42 for holding a water treatment material and which walls 43 and 44 having mesh -covered apertures 49.

Additionally, as shown therein, the filter plate 26 may be provided with mesh-covered apertures 34.

It should be noted that there is no teaching, or even suggestion, in the O'Flynn et al. patent that the water - treatment material shown therein is capable of removing anything other than color, odor and bad taste from water, specifically not scale.

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It should also be noted that there is no teaching, or even suggestion in then O'Flynn et al., that the mesh covering the apertures 49 has a surface to which scale is attracted or is of a material different from that of the mesh covering the apertures 34.

It is therefore considered that a person of ordinary skill in the art would find no teaching, or even suggestion, in the O'Flynn et al. patent that would lead that person to the filter defined by Claim 15.

# II. The Rejection of Claim 5 Under 35 U.S.C. 103(e) as Unpatentable Over O'Flynn et al in View of Martindal

The rejection of Claim 5 under 35 U.S.C. 103(e) as unpatentable over O'Flynn et al. in view of Martindale is considered to lack merit.

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Respectfully submitted,

By Norman N. Spain, Reg. 17,846

Attorney

(914) 333-9653

# APPENDIX

The claims on appeal are:

- 2. A filter for use in a water heating vessel according to

  Claim 15, wherein the scale collector is supported by a carrier

  member on the frame of the filter.
- 3. A filter for use in a water heating vessel according to Claim 2, characterised in that the carrier member is detachably mounted on the frame.
- 4. A filter for use in a water heating vessel according to claim 2, characterised in that the carrier member is permanently mounted on the frame.
- 5. A filter for use in a water heating vessel according to Claim 2, characterised in that the scale collector is removably mounted to the carrier member.
- 6. A filter for use in a water heating vessel according to Claim 3 wherein the carrier member is situated on a part of the frame away from said first mesh material.
- 9. A filter for use in a water heating vessel according to Claim 15, wherein the scale collector is carried on the frame

towards an end thereof which in use in a water heating vessel is closest to the bottom of the vessel.

- 10. A water heating vessel including a filter according to
  Claim 15 removably mounted within the vessel and extending over
  a water outlet of the vessel.
- 11. A water heating vessel according to Claim 10, characterised in that the water heating vessel comprises a kettle.
- 15. A filter for use in a water heating vessel for removing sedimentary material, including scale, from the water, wherein the filter comprises a first mesh material provided with a frame and a scale collector, separate from said first mesh material and coupled to the frame, said scale collector comprising a block of compressed mesh material different from said first mesh material and having a surface to which scale is attracted.